

#### ABSTRACT OF THE DISCLOSURE

The system and method of the invention is a rail test simulator for training operators of rail inspection systems. More particularly it is a simulator that simulates the visual cues characteristic of a rail inspection in a synchronized manner with data of the type acquired by rail testing equipment, such that an operator of the simulator may experience instrumental data and visual cues characteristic of a rail inspection and be provided an opportunity for response to the data and visual cues which mimic the conditions, options, circumstances and/or physical choices of an actual rail inspection. The data presented may be ultrasonic data, induction data, both ultrasonic and induction data or any other type of data that may be correlated with rail defects. Preferably, the simulator has the capacity to replicate all functions of an actual inspection vehicle. For example, it has provision for simulating a closer inspection of specific areas of the track by including controls that simulate the stopping, reversing and speed variation controls of an actual testing vehicle. Further, the simulator optionally includes the capability of recording and replaying a simulation to review operator performance.